

**Amendments to the Abstract:**

Please replace the Abstract of the Disclosure with the following:

A system for securely loading (flashing) code into a flash memory card includes code comprising a kernel portion that transitions the system from a protected-mode to a real-mode and a user portion that includes the code to be loaded onto the flash card. In one embodiment, an asymmetric authentication scheme ensures that the code flashed into the flash card is verified as authorized while complying with the open-source requirements of the operating system. In this embodiment, the public key may become a part of the kernel portion, which is available for all to inspect, while the private key is known only to the user portion. The user portion may generate a signature that is encrypted using the private key. The signature may be generated algorithmically based upon characteristics of or information associated with the corresponding data processing system.